Applicant: Robert F. Wilson, et al.

PATENT
Serial No.: 10/613.121

Atty Docket: 21913-301

Serial No.: 10/613,121 Art Unit: 3734

**AMENDMENTS TO THE CLAIMS** 

The listing of claims is set forth below.

<u>Listing of Claims</u>

1. (Original) A method of reinforcing a native valve comprising attaching a

reinforcing support to at least one valve leaflet, said support allowing a free edge of the

at least one valve leaflet to form a seal with free edges of adjacent leaflets during

diastole.

2. (Original) The method of claim 1 wherein attaching a reinforcing support to the at

least one valve leaflet comprises attaching a reinforcing support to a downstream

surface of the at least one valve leaflet.

3. (Original) The method of claim 1 wherein attaching a reinforcing support to the at

least one valve leaflet comprises attaching a reinforcing support to an upstream surface

of the at least one valve leaflet.

4. (Original) The method of claim 1 wherein attaching a reinforcing support to the at

least one valve leaflet comprises attaching a reinforcing support to both an upstream

surface and a downstream surface of the at least one valve leaflet.

5. (Original) The method of claim 4 wherein attaching a reinforcing support to both

an upstream surface and a downstream surface of the at least one valve leaflet

comprises sandwiching the at least one valve leaflet between adjacent support

members on opposite sides of the at least one valve leaflet.

6. (Original) The method of claim 5 wherein sandwiching the at least one valve

leaflet between adjacent support members on opposite sides of the at least one valve

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leaflet comprises sandwiching the at least one valve leaflet between adjacent,

interlocking support members on opposite sides of the at least one valve leaflet.

7. (Withdrawn) A device useable to attach a support to a valve leaflet comprising:

a sheath;

a delivery mechanism slideably disposed within the sheath, said delivery

mechanism constructed and arranged to carry at least one support, whereby when said

sheath is retracted to expose said delivery mechanism, said delivery mechanism is

moveable such that the support is pressed against the valve leaflet.

8. (Withdrawn) The device of claim 7 wherein said delivery mechanism comprises

at least one delivery arm pivotally attached to a carrier.

9. (Withdrawn) The device of claim 8 further comprising at least one activation

string operably connected to said at least one delivery arm such that pulling said at least

one activation string causes said at least one delivery arm to pivot.

10. (Withdrawn) A device useable to support a prolapsed valve leaflet, comprising:

a support;

an attachment mechanism, operably attached to the support member, and

useable to attach the support member to a prolapsed valve leaflet.

11. (Withdrawn) The device of claim 10 wherein said support comprises a first part

pivotally connected to a second part.

12. (Withdrawn) The device of claim 11 further comprising a hinge pivotally

connecting said first and second parts.

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13. (Withdrawn) The device of claim 10 wherein said support comprises at least one elongate beam.

14. (Withdrawn) The device of claim 10 wherein said support comprises Nitonol.

15. (Withdrawn) The device of claim 10 wherein said support comprises an open

network of support members.

16. (Withdrawn) The device of claim 10 wherein said support comprises a covered

network of support members.

17. (Withdrawn) The device of claim 10 wherein said support comprises a substrate.

18. (Withdrawn) The device of claim 17 wherein said substrate is curved, forming a

concave side and a convex side, the concave side facing a downstream direction when

the device is attached to a prolapsed valve leaflet.

19. (Withdrawn) The device of claim 17 wherein said substrate is attachable to an

upstream side of a prolapsed valve.

20. (Withdrawn) The device of claim 17 wherein said substrate is attachable to a

downstream side of a prolapsed valve.

21. (Withdrawn) The device of claim 10 wherein said attachment mechanism

comprises barbs.

22. (Withdrawn) The device of claim 10 wherein said attachment mechanism

comprises staples.

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23. (Withdrawn) The device of claim 10 wherein said attachment mechanism

protrudes from an upstream side of said support.

24. (Withdrawn) The device of claim 10 wherein said attachment mechanism

protrudes from a downstream side of said support.

25. (Withdrawn) The device of claim 10 wherein said support comprises an

upstream member constructed and arranged for placement on an upstream side of a

prolapsed valve leaflet, and a downstream member constructed and arranged for

placement on a downstream side of the prolapsed valve leaflet.

26. (Withdrawn) The device of claim 25 wherein said attachment mechanism

operably connects the upstream member to the downstream member, such that the

prolapsed valve leaflet is sandwiched between the upstream member and the

downstream member.

27. (Withdrawn) The device of claim 25 wherein said attachment mechanism

comprises a magnetic field operably connecting the upstream member to the

downstream member.

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